数式テスト

$$\nexists n \forall x, y, z((n, x, y, z \in \mathbb{N}) \wedge (x^n + y^n = z^n) \wedge (n \geq 3))$$

1. 自然演繹

$$\frac{A \Rightarrow B \quad A}{B}(\Rightarrow E)$$

$$\frac{A}{B \vee A}(\vee I)\frac{B}{B \vee A}(\vee I)$$

$$\frac{A \vee B \quad \dfrac{[A]^1}{B \vee A}(\vee I) \quad \dfrac{[B]^1}{B \vee A}(\vee I)}{B \vee A}(\vee E, 1)$$

$$\frac{A \vee (B \vee C) \quad \dfrac{[A]^2}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee V) \quad \frac{[B \vee C]^2 \quad \dfrac{\dfrac{[B]^1}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee I) \quad \dfrac{[C]^1}{(A \vee B) \vee C}(\vee I)}{(A \vee B) \vee C}(\vee E, 1)}{(A \vee B) \vee C}(\vee E, 2)$$

$$\frac{A \vee B \quad \dfrac{\begin{array}{c}\vdots \\ [A]^1\end{array}}{B \vee A}(\vee I) \quad \dfrac{\begin{array}{c}\vdots \\ [B]^1\end{array}}{B \vee A}(\vee I)}{B \vee A}(\vee E, 1)$$

X	$P(X = i)$
1	1/6
2	1/6
3	1/6
4	1/6
5	1/6
6	1/6

$$\dfrac{A \vee (B \vee C) \quad \dfrac{\dfrac{[A]^2}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee V) \quad \dfrac{[B \vee C]^2 \quad \dfrac{\dfrac{[B]^1}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee I) \quad \dfrac{[C]^1}{(A \vee B) \vee C}(\vee I)}{(A \vee B) \vee C}(\vee E, 1)}{(A \vee B) \vee C}(\vee E, 2)$$

$$\dfrac{A \vee (B \vee C) \quad \dfrac{\dfrac{[A]^2}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee I) \quad \dfrac{[B \vee C]^2 \quad \dfrac{\dfrac{[B]^1}{A \vee B}(\vee I)}{(A \vee B) \vee C}(\vee I) \quad \dfrac{[C]^1}{(A \vee B) \vee C}(\vee I)}{(A \vee B) \vee C}(\vee E, 1)}{(A \vee B) \vee C}(\vee E, 2)$$

18.

$$\dfrac{(A \to B) \vee (A \to B) \quad \dfrac{\dfrac{[A \to B]^1 \quad [A]^2}{B}(\to E)}{B \vee C}(\vee I) \quad \dfrac{\dfrac{[A \to C]^1 \quad [A]^2}{B}(\to E)}{B \vee C}(\to E)}{B \vee C}(\vee E, 1)}{A \to (B \wedge C)}(\to I, 2)$$